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Stephen Gilbert

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EXAMINER

GOOD JOHNSON, MOTTLEWA

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,845

Applicant(s)

GILBERT ET AL.

Examiner

M GOOD JOHNSON

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-37 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 04/13/2010
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 8-15, 20-26 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnick et al., U.S. Patent Number 7,086,009 B2 in view of Hatanaka et al., U.S. Patent Number 5,926,177.

Regarding claim 1, Resnick discloses a display entity for use in presenting a visual depiction of a process entity of a process plant to a user on a display device (figure 11), the display entity comprising: a computer readable memory (PC 100 and 102, it is inherent that PC's have computer readable memory); and, a display object stored on the computer readable memory and adapted to be executed on a processor (col. 7, lines 30-48), the display object including: a property memory adapted to store a value of a property associated with the process entity(col. 11, lines 29-67); a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor (col. 12, lines 5-11); a definition routine adapted to enable a user to define a routine that operates in conjunction with the graphic representation of the process entity and the value of the

property associated with the process entity during execution of the display object (col. 29, line 61- col. 30, line 26); and a routine that operates in conjunction with the graphic representation of the process entity displayed to the user and that is associated with the value of the property (col. 30, line 50 – col. 31, line 16), to reflect an operating condition of the process plant associated with the process entity (col. 2, lines 21-26, control over a process compare the current status to a desired operating level calculate a corrective action and implement a change, and furthermore in process control and manufacturing control systems, generally a pilot installation is used and where the hardware changes and application system grows executing the application model, col. 6, lines 3-49, which Examiner interprets as operating condition of the process plant).

However, it is noted that Resnick fails to disclose altering the manner in which the graphic representation of the process entity is displayed to the user according to the value of the property.

Hatanaka discloses altering the manner in which the graphic representation of the process entity is displayed to the user according to the value of the property (col. 3, line 58 – col. 4, line 45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the routine that operates with the graphic representation displayed to the user as disclosed by Resnick, the alteration of the manner in which the graphic representation of the process entity is displayed as disclosed by Hatanaka, to allow model changes, immediate indication of different states of the objects and switching between different views.

Regarding claim 8, Resnick et al. discloses reference that connects a property value to a data source within the process plant (figures 12-20).

Regarding claims 9, 20, 32, Resnick et al. disclose the routine is an executable routine that transforms the property value from the data source within the process plant (figure 10, which shows a process plant with fill bins and alerts to alarming conditions, which Examiner interprets as an executable routine that transforms, i.e. fills the property value).

Regarding claims 10, 21, 33, Resnick et al. discloses transforming the property value to a duration (Column 21, lines 23-28, transforming the property value to a duration of a fill bin).

Regarding claims 11, 22, 34, Resnick et al. discloses detecting a condition with a change in graphic presentation. (Column 11, lines 61-64, alarm information).

Regarding claims 12, 23, 35, Resnick et al. discloses the detected condition relates to a communication status (col. 11, line 60, information gathering, which Examiner interprets as a communication status).

Regarding claims 13, 24, 36, Resnick et al. discloses user input from the user via graphic visualization (col. 8, lines 40-43).

Regarding claims 14, 25, 37, Resnick et al. discloses the executable routine uses the input to cause a change to the property value to effect a runtime environment exterior to the display entity (col. 14, lines 22-34).

Regarding claim 15, it is rejected based upon similar rational as above claim 1. Resnick et al. also discloses a library of graphic objects, each graphic object including a visual representation of a physical or a local entity within the process plant (Fig. 10), a graphically based editor canvas routine that enables a user to define an executable graphic display by placing one or more visual representations of the graphic objects from the library of graphic objects onto an edit-canvas to define a manner in which the one or more visual representations of the graphic objects will be displayed on a display device to a user during execution of the graphic display (base object editor 2034), a property definition canvas routine adapted to enable a user to define a property associated with at least one of the plurality of graphic objects (interface definitions 2002); a binding definition routine adapted to enable a user to specify a binding between the property and a runtime environment within the process plant (interface definition 2002).

Regarding claim 26, it is rejected based upon similar rational as claim 1 above. Resnick discloses a processor (personal computers 100 and 102); a plurality of graphical object adapted to be executed by the processor (col. 9, lines 9-10, application object executing upon personal computers); a graphical display (personal computers 100 and 102).

2. Claims 2-7, 16-19 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnick in view of Hatanaka et al. as applied to claims 1, 15 and 26 above, and further in view of Joseph et al., U.S. Patent Number 5,485,600.

Regarding claims 2, 16, 27, it is noted that Resnick et al. and Hatanaka do not explicitly disclose an animation routine that animates the graphic representations. However, Joseph et al. discloses an animation routine that animates the graphic representations in response to changes in data values (Column 7, lines 50-55). It would have been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Resnick et al. and Hatanaka, to provide dynamic control systems and provide a user with an easily known the status of a device.

Regarding claims 3, 17, 28, Joseph et al. discloses animation routine animates the graphic representation in a continuous manner (Column 15, lines 7-14, drawing the objects and redrawing the virtual objects at run time, which Examiner interprets as continuous manner).

Regarding claims 4, 18, 29, it is noted that Resnick et al. and Hatanaka fail to disclose the animation routine applying at least one of a skew, rotation, a translation and resizing to the graphic representation. However, Joseph et al. discloses animation routine applying at least one of a skew, rotation, a translation and resizing to the graphic representation. (Column 7, lines 43-50). It would have been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Resnick et al. and Hatanaka, to provide dynamic control systems and recognizable status updates of a device or system.

Regarding claims 5, 19, 30, it is noted that Resnick et al. and Hatanaka fail to disclose the animation routine applying at least one a color animation, or a color gradient animation, or an opacity animation, or a font characteristic animation, or a video property the graphic representation. However, Joseph et al. discloses animation routine applying at least one a color animation, or a color gradient animation, or an opacity animation, or a font characteristic animation, or a video property the graphic representation (Column 7, lines 43-50). It would have been obvious to one of ordinary skill to combine the animation of Joseph et al. with the graphic representation of Resnick et al. and Hatanaka, with the motivation of dynamic control systems and easily know the status of a device.

Regarding claims 6 and 31, it is noted that Resnick et al and Hatanaka fail to disclose the graphic representation includes two or more primitives and wherein the routine changes a property of one of the primitives. However Joseph et al. discloses graphic representation includes two or more primitives (Fig. 29) and wherein the routine changes a property of one of the primitives (Column 19, lines 32-39). It would have been obvious to one of ordinary skill to combine the graphical representation of Resnick and Hatanaka, with the multiple graphic primitives with a routine which changes a property of a graphic primitive of Joseph et al with the motivation of having a multitude of different controls in a process system.

Regarding claim 7, Resnick discloses the property of one of the primitives is a fill property (figures 10 and 11).

Response to Arguments

3. Applicant's arguments filed 03/09/2010 have been fully considered but they are not persuasive.

Applicant argues Resnick and Hatanaka in combination fail to disclose a definition routine adapted to enable a user to define a routine that operates in conjunction with the graphic representation of a process entity object and a value of a property associated with a process entity during execution of the display object, as well as a routine that operates in conjunction with the graphic representation of the process entity to alter the manner in which the graphic representation of the process entity is

displayed to the user according to the value of the property to reflect an operating condition of the process plant associated with the process entity.

Resnick col. 29, line 61-col. 30 line 26 as disclosing an interface component definitions (2002) including a configuration interface (2010), runtime interface (2012), and package interface to enable interaction with different environments. The configuration interface 2010 and package interface 2014, each enable an object configuration, editing, packaging, importing, exporting, uploading, downloading, copying and storage. The runtime interface 2012 further sets methods that provide behaviors to the object during runtime. Therefore, it is the interpretation of the Examiner that Resnick discloses a definition routine, i.e. interface component definitions 2002, that enable a user to define a routine, col. 30, lines 15-61, GetAttribute, SetAttribute call returns, EndRestore, and other commands, that operates in conjunction with the graphic representation of a process entity object and a value of a property associated with a process entity during execution of the display object, col. 30, lines 10-14, that operate during runtime to provide behaviors to the object when the object is deployed, as well as a routine that operates in conjunction with the graphic representation of the process entity according to the value of the property to reflect an operating condition of the process plant associated with the process entity (col. 11, lines 49-67, engine object host application objects and control execution of the application objects including executing logic for carrying out process control operations).

Applicant argues that nowhere does the cited passage describe a routine that enables a user to define another routine that operates in conjunction with a graphic

representation of a process entity and the value of a property associated with the process entity. Resnick discloses in col. 30, line 50 - col. 31, line 16, a routine that operates in conjunction with a graphic representation of a process entity displayed to a user and that is associated with the value of a property. It is the interpretation of the Examiner that the object designer, which supports an object template development process, discloses a routine that operates in conjunction with a graphic representation of a process entity, such as the object.

Applicant argues, Hatanaka fails to disclose the graphic representation as a graphic representation of a process entity, and the change in the manner in which the graphic representation of the process entity is displayed to the user is not based on the value of a property associated with a process entity to reflect an operating condition of a process plant wherein the reflected operating condition is associated with the process entity as called for in claim 1.

4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Resnick is relied upon by the Examiner as disclosing the graphic representation as a graphic representation of a process entity, and the graphic representation of the process entity is displayed based on the value of a property associated with a process entity to reflect an operating condition of a process plant wherein the reflected operating

condition is associated with the process entity. Hatanaka is relied upon as disclosing the changing, altering, modifying the graphic representation of the object. Resnick discloses in process control and manufacturing control systems, generally a pilot installation is used and where the hardware changes and application system grows executing the application model, col. 6, lines 3-49. Therefore it would have been obvious to include for the reasons as indicated above in the rejection as well as for pilot installations the altering of the graphic representation of the object to reflect an operating condition of a process plant with different development stages of the process plant.

Applicant argues Joseph fails to disclose claims 3, 17, and 28, an animation routine that animates a graphic representation in a continuous manner; claims 4, 18, and 19, an animation routine that applies skew, rotation and resizing to a graphic representation; claims 5, 19, and 30, a color animation, a color gradient animation, opacity, animation, or a font characteristic, or a video property of the graphic representation; and claims 6 and 31, graphic representations that include two or more primitives and a routine that changes a property of one of the primitives. Joseph et al. discloses animation routine applying at least one of a skew, rotation, a translation and resizing to the graphic representation (column 7, lines 43-50, behavior used to animate the object, with rotation, translation or several graphical representations including visual representations of light, which are further discussed in col. 20, and (column 19, lines 32-39, user can generate and select a new state table, i.e. routine, to implement new operating rules of the object).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M GOOD JOHNSON whose telephone number is (571)272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Motilewa Good-Johnson/

Primary Examiner, Art Unit 2628